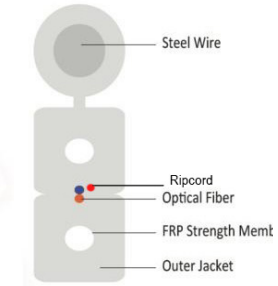
Fiber Optics

Outdoor Drop Cable

Features and Benefits

- Fiber-count 1, 2 and 4 fibers
- Robust and lightweight
- LSZH jacket for internal/outdoor use
- Suitable for tight corners and bends
- Compact diameter
- Color-coded fibers for easy identification
- Compatible with field terminated connectors
- Designed for easy stripping with or without tools
- Standard cable length of 1km



Overview

Drop outdoor cables are constructed with a flat profile jacket and containing one, two or four fibers. The optical fibers contained in the center of the cable and are protected by dielectric strength members made of fiberglass reinforced plastic (FRP) embedded in the jacket on opposite sides of the fibers. The FRP strength members add mechanical strength to the low-profile fiber optic cable and protects the 250 µm optical fibers against stress during installation and after installation. The flat drop outdoor cables have a steel wire embedded to one side of the cable which add additional mechanical strength. Ideal for use in FTTx outdoor applications, the cable is well suited for connections between the dome closure and small dwelling unit / warehouse and independent villas. The cable is suitable for termination with a quick assembly connector or can be fusion or mechanical spliced with standard pigtails.

Applications

- FTTx applications
- CCTV

Standards

- ITU.T G.652D / G.657A/B
- IEC 60332-1-2, IEC 60754-1,2 & IEC 61034-2

Technical Data

Optical Data

Fiber type	Unit	OS2 G.652D		G.657A1/A2			G.657B1/B2		
Wavelength	nm	1310	1550	1310	1550	1625	1310	1550	1625
Attenuation	dB/km	≤ 0.40	≤ 0.30	≤ 0.36	≤ 0.21	≤ 0.22	≤ 0.35	≤ 0.21	≤ 0.22
Chromatic dispersion	ps/nm.km	≤ 3.5	≤ 18	≤ 3.5	≤ 18	≤ 21	≤ 3.5	≤ 18	≤ 21
Zero dispersion wavelength	nm	1300 ~ 1324		1300 ~ 1324			1300 ~ 1324		
Zero dispersion slope	ps/nm2.km	≤ 0.092		≤ 0.092			≤ 0.092		
PMD	ps/√km	≤ 0.2		≤ 0.2			≤ 0.2		
Cut-off wavelength	nm	≤ 1260		≤ 1260			≤ 1260		

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Fiber type		Unit	OS2 G.652D		G.657A1/A2			G.657B1/B2		
Mode-field diameter		µm	9.2±0.4	10.4±0.5	9.2±0.5	10.5±0.8		9.2±0.4	10.5±0.8	
Macro Bend Loss	30mm radius x 100 turns	dB	-	≤ 0.05	-	-	-	-	-	-
	15mm radius x 100 turns		-	-	-	≤0.25	≤0.03	-	≤0.03	≤0.03
	10mm radius x 100 turns		-	-	-	≤0.75	≤0.1	-	≤0.1	≤0.08
	7.5mm radius x 100 turns		-	-	-	-	-	-	≤0.5	≤0.15
Core/Clad Concentricity Error		µm	≤0.6		≤0.5			≤0.6		
Cladding Diameter		µm	125 ± 1		125 ± 0.7			125 ± 1		
Cladding Non-circularity		%	≤1.0		≤1.0			≤1.0		
Coating Diameter		%	245 ± 15		245 ± 15			245 ± 15		
Proof Test Level		Kpsi	≥ 100		≥ 100			≥ 100		
Fiber curl		m	≥ 4		≥ 4			≥ 4		

Cable Construction

Parameter	Values
Primary Coating Color Layer	250 ± 15µm
Dielectric strength member	FRP ø 0.45 ± 0.05mm
Dielectric strength member	Steel wire ø 1.2 ± 0.05mm
Outer jacket	LSZH

Color of Buffer

1 core drop cable	2 core drop cable	4 core drop cable
01 - Blue	01 - Blue	01 - Blue
-	02 - Orange	02 - Orange
-	-	03 - Green
-	-	04 - Brown

Environmental Data

Temperature Range	Value
Service	- 40° C to +60° C

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Physical Data

No. of fibers	Fiber count	*Cable diameter PE/LSZH	Nominal weight	Maximum tensile load		Crush resistance		Minimum bend Radius			
				Short term	Long term	Short term	Long term	Loaded		Installed	
		mm	Kg/Km	N	N	N/cm	N/cm	652D	657A	652D	657A
Black	1,2 or 4	2.0x5.3 ± 0.2mm	15.6	600	300	1000	500	60	40	30	20

Ordering Information

FC ___ ___ ___ ___ ___

3 | 4-6 | 7-8 | 9-11 | 12

03. Fiber Type
- 1 = OM1
- 2 = OM2
- 3 = OM3
- 4 = OM4
- 5 = OM5
- S = G.652D
- A = G.657A1- BIF 10mm
- N = G.657A2- BIF 7.5mm
- B = G.657B3- BIF 5mm
- G = G.655

04-06. Cable Type
- DRP = Drop Cable

07-08. Strength Member
- SW = Steel Strength Member

09-11. Fiber Count
- 001 = 1F
- 002 = 2F
- 004 = 4F

12. Jacket Material
- L = LSZH
- V = PVC
- R = Riser
- E = PE
- P = Plenum
- N = Nylon
- B = PBT

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